## What is claimed is:

- 1. A flexible hose comprising: a metal bellows tube having a first rubber layer on the outer circumference thereof; and an exterior layer formed on the outer circumference of the first rubber layer; wherein the metal bellows tube has a corrugated structure with a plurality of spaced apart rings having peaks and a plurality of channels disposed between the rings forming valleys below the peaks and wherein the first rubber layer is of a composition including at least a rubber of an acryl group and/or a rubber of an ethylene-propylene-diene group and with the rubber layer being flowable at low temperature such that each channel is filled with rubber extending throughout each valley.
- 2. A flexible hose of claim 1, wherein the plurality of channels disposed between the rings vary in width in a radial direction wherein the width of each channel between peaks is narrower than the width of each valley below the peaks.
- **3.** A flexible hose of claim 2, further comprising a reinforcing layer formed between said intermediate rubber layer and said exterior layer.
- **4.** A flexible hose of claim 2, wherein said intermediate rubber layer further comprises a resorcinol group.

**5.** A flexible hose of claim 4 wherein the first rubber layer comprises an acryl group unit of the formula:

wherein,  $x = 29.9 \sim 74.9$ ,  $y = 25\sim 70$ ,  $z=0.1\sim 18$  and a carboxyl group is a crosslinking group.

**6.** A flexible hose of claim 4, wherein the first rubber layer comprises an acryl group unit of the formula:

wherein,  $x = 29.9 \sim 74.9$ ,  $y = 25\sim 70$ , and  $z=0.1\sim 10$ , and further wherein R is hydrogen or ethyl group and R' is alkyl group with carbon number  $1\sim 18$  and an end epoxy group is a crosslinking group.

7. A flexible hose of claim 5 wherein  $x = 34.7 \sim 69.7$  and  $y = 30 \sim 65$ .